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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,677	10/08/2004	Mitsuhiro Kasahara	P26092	3993

7055 7590 11/28/2007

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EXAMINER	
TRAN, TRANG U	
ART UNIT	**PAPER NUMBER**
2622	

NOTIFICATION DATE	DELIVERY MODE
11/28/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary	Application No.	Applicant(s)	
	10/509,677	KASAHARA ET AL.	
	Examiner	Art Unit	
	Trang U. Tran	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) *2-14 and 16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/10/2005; 8/19/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species I, claims 1 and 15 in the reply filed on October 29, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 2-14 and 16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 29, 2007.

Drawings

3. Figures 14-18 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1 and 15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 19, respectively of copending Application No. 10/509,679.

Regarding claim 1 of this application, claim 1 of copending Application No. 10/509,679 disclose all the limitations of claim 1 except for providing the claimed an interpolation circuit that generates interpolated pixels between lines on the basis of said inputted interlaced video signal. The capability of using an interpolation circuit that generates interpolated pixels between lines on the basis of said inputted interlaced video signal is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of an interpolation circuit that generates interpolated pixels between lines on the basis of said inputted interlaced video signal

into claim 1 of copending Application No. 10/509,679's system in order to select available well known interlaced to progressive conversion methods.

Regarding claim 15 of this application, claim 15 of copending Application No. 10/509,679 disclose all the limitations of claim 15 except for providing the claimed generating interpolated pixels between lines. The capability of using generating interpolated pixels between lines is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of generating interpolated pixels between lines into claim 1 of copending Application No. 10/509,679's system in order to select available well known interlaced to progressive conversion methods.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Figs. 14-18, pages 1-17 of the Specification).

In considering claim 1, the admitted prior art (Figs. 14-18, pages 1-17 of the Specification) discloses all the claimed subject matter, note 1) the claimed a motion calculation circuit that calculates a motion amount in the vertical direction of a picture on the basis of said interpolation signal outputted from said interpolation circuit is met by

the motion detection circuit J3 which detects the motion between frames (progressive signal) (Fig. 15, page 3, lines 1-9), 2) the claimed a still picture processing circuit that generates a still picture progressive signal by still picture processing from said inputted interlaced video signal is met by the inter-frame interpolation circuit J4 (Fig. 15, page 3, lines 10-18), 3) the claimed a moving picture processing circuit that generates a moving picture progressive signal by moving picture processing from said inputted interlaced video signal is met by the intra-field interpolation circuit J5 (Fig. 15, page 3, line 19 to page 4, line 2), and 4) the claimed an output circuit that outputs the still picture progressive signal outputted from said still picture processing circuit as said progressive video signal when the motion amount in the vertical direction calculated by said motion calculation circuit is smaller than a first value is met by the switching circuit J6 (Fig. 15, page 4, lines 3-13).

However, the admitted prior art (Figs. 14-18, pages 1-17 of the Specification) explicitly does not disclose the claimed an interpolation circuit that generates interpolated pixels between lines on the basis of said inputted interlaced video signal.

The capability of using an interpolation circuit that generates interpolated pixels between lines on the basis of said inputted interlaced video signal is old and well known in the art. Therefore, the Official Notice is taken.

It would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of an interpolation circuit that generates interpolated pixels between lines on the basis of said inputted interlaced video signal into the admitted prior art (Figs. 14-18, pages 1-17 of the Specification)'s

system in order to increase the quality of the output video signal in the converting interlaced video signal to progressive video signal.

Claim 15 is rejected for the same reason as discussed in claim 1.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kondo et al. (US Patent No. 7,116,372 B2) disclose method and apparatus for deinterlacing.

Lim et al. (US Patent No. 6,606,126 B1) disclose deinterlacing method for video signals based on motion-compensated interpolation.

Okuno et al. (US Patent No. 6,288,745 B1) disclose scanner line interpolation device.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 22, 2007

Trang U. Tran
Primary Examiner
Art Unit 2622